

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A method for preparing submicron sized particles of an organic compound, the solubility of which is greater in a water-miscible first solvent than in a second solvent which is aqueous, the process comprising the steps of:

(i) dissolving the organic compound in the water-miscible first solvent to form a solution, the first solvent being selected from the group consisting of N-methyl-2-pyrrolidinone, 2-pyrrolidone, dimethyl sulfoxide, dimethylacetamide, lactic acid, methanol, ethanol, isopropanol, 3-pentanol, n-propanol, glycerol, butylene glycol, ethylene glycol, propylene glycol, mono- and diacylated monoglycerides, dimethyl isosorbide, acetone, dimethylformamide, 1,4-dioxane, polyethylene glycol, polyethylene glycol esters, polyethylene glycol sorbitans, polyethylene glycol monoalkyl ethers, polypropylene glycol, polypropylene alginate, PPG-10 butanediol, PPG-10 methyl glucose ether, PPG-20 methyl glucose ether, PPG-15 stearyl ether, propylene glycol dicaprylate, propylene glycol dicaprate, propylene glycol laurate;

(ii) mixing the solution with the second solvent to define a pre-suspension of particles in a friable form; and

(iii) adding energy to the pre-suspension to form particles having an average effective particle size of from about 400 nm to about 2 micron.

Claim 2 (original): The method of claim 1 further comprising the step of mixing into the second solvent a first surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

Claim 3 (original): The method of claim 2 wherein the nonionic surfactant is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, polyvinylpyrrolidone, albumin, heparin, and hirudin.

Claim 4 (original): The method of claim 2 wherein the anionic surfactant is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts, cholic acid, deoxycholic acid, glycocholic acid, taurocholic acid, glycodeoxycholic acid, and calcium carboxymethylcellulose.

Claim 5 (original): The method of claim 2 wherein the cationic surfactant is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 6 (original): The method of claim 2 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 7 (original): The method of claim 6 wherein the anionic surfactant is a copolymer of oxyethylene and oxypropylene.

Claim 8 (original): The method of claim 7 wherein the copolymer of oxyethylene and oxypropylene is a block copolymer.

Claim 9 (original): The method of claim 2 further comprising the step of mixing into the second solvent a second surface modifier.

Claim 10 (original): The method of claim 9 wherein the second surface modifier is selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

Claim 11 (currently amended): The method of claim 10 wherein the second surface modifier is a bile ~~salt~~acid or a salt thereof.

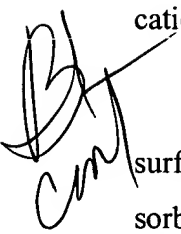
Claim 12 (original): The method of claim 10 wherein the second surface modifier is selected from deoxycholic acid, glycocholic acid, glycodeoxycholic acid, taurocholic acid and salts of these acids.

Claim 13 (original): The method of claim 2 further comprising the step of adding a pH adjusting agent to the second solvent.

Claim 14 (original): The method of claim 13 wherein the pH adjusting agent is selected from the group consisting of sodium hydroxide, hydrochloric acid, tris buffer, citrate buffer, acetate, lactate, and meglumine.

Claim 15 (original): The method of claim 13 wherein the pH adjusting agent is added to the second solvent to bring the pH of the second solvent within the range of from about 3 to about 11.

Claim 16 (original): The method of claim 1 further comprising the step of mixing into the solution a third surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.



Claim 17 (original): The method of claim 16 wherein the nonionic surfactant of the third surface modifier is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 18 (original): The method of claim 16 wherein the anionic surfactant of the third surface modifier is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.


Claim 19 (original): The method of claim 16 wherein the cationic surfactant of the third surface modifier is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 20 (original): The method of claim 16 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 21 (original): The method of claim 20 wherein the third surface modifier is a copolymer of oxyethylene and oxypropylene.

Claim 22 (original): The method of claim 21 wherein the copolymer of oxyethylene and oxypropylene is a block copolymer.

Claim 23 (original): The method of claim 16 further comprising the step of mixing into the solution a fourth surface modifier.

 Claim 24 (original): The method of claim 23 wherein the fourth surface modifier is selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

Claim 25 (original): The method of claim 24 wherein the fourth surface modifier is a nonionic surfactant selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 26 (original): The method of claim 24 wherein the fourth surface modifier is a nonionic surfactant selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 27 (currently amended): The method of claim 24 wherein the fourth surface modifier is a cationic surfactant selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 28 (original): The method of claim 16 further comprising the step of mixing into the second solvent a fifth surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

Claim 29 (original): The method of claim 28 wherein the fifth surface modifier is a nonionic surfactant selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 30 (original): The method of claim 28 wherein the fifth surface modifier is an anionic surfactant selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 31 (original): The method of claim 28 wherein the fifth surface modifier is a cationic surfactant selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 32 (original): The method of claim 28 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 33 (original): The method of claim 32 wherein the fifth surface modifier is a copolymer of oxyethylene and oxypropylene.

Claim 34 (original): The method of claim 33 wherein the copolymer of oxyethylene and oxypropylene is a block copolymer.

Claim 35 (original): The method of claim 28 further comprising the step of mixing into the solution a sixth surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

Claim 36 (original): The method of claim 1 further comprising the step of mixing into the second solvent a phospholipid.

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Claim 37 (original): The method of claim 36 wherein the phospholipid is selected from natural phospholipids and synthetic phospholipids.

Claim 38 (original): The method of claim 36 wherein the phospholipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine, phosphatidylserine, phosphatidylinositol, phosphatidylglycerol, phosphatidic acid, lysophospholipids, egg phospholipid and soybean phospholipid.


Claim 39 (original): The method of claim 36 further comprising the step of mixing into the solution a seventh surface modifier selected from anionic surfactants, cationic surfactants and non-ionic surfactants.

Claim 40 (original): The method of claim 39 wherein the nonionic surfactant of the seventh surface modifier is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 41 (original): The method of claim 39 wherein the anionic surfactant of the seventh surface modifier is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 42 (original): The method of claim 39 wherein the cationic surfactant of the seventh surface modifier is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 43 (original): The method of claim 39 wherein the seventh surface modifier is a bile acid or a salt thereof.

 Claim 44 (original): The method of claim 39 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 45 (original): The method of claim 44 further comprising the step of adding a phospholipid to the second solvent.

Claim 46 (original): The method of claim 45 wherein the phospholipid is selected from natural phospholipids and synthetic phospholipids.

Claim 47 (original): The method of claim 45 wherein the phospholipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine, phosphatidylserine, phosphatidylinositol, phosphatidylglycerol, phosphatidic acid, lysophospholipids, egg phospholipid and soybean phospholipid.

Claim 48 (original): The method of claim 45 further comprising the step of mixing into the solution an eighth surface modifier selected from anionic surfactants, cationic surfactants and non-ionic surfactants.

Claim 49 (original): The method of claim 48 wherein the nonionic surfactant of the eighth surface modifier is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 50 (original): The method of claim 48 wherein the anionic surfactant of the eighth surface modifier is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 51 (original): The method of claim 48 wherein the cationic surfactant of the eighth surface modifier is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 52 (original): The method of claim 48 wherein the eighth surface modifier is a bile acid or a salt thereof.

Claim 53 (original): The method of claim 48 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 54 (original): A method for preparing submicron sized particles of an organic compound, the solubility of which is greater in a water-miscible first solvent than in a second solvent which is aqueous, the process comprising the steps of:

(i) dissolving the organic compound in the water-miscible first solvent to form a solution, the first solvent being selected from the group consisting of N-methyl-2-pyrrolidinone, 2-pyrrolidone, dimethyl sulfoxide, dimethylacetamide, lactic acid, methanol, ethanol, isopropanol, 3-pentanol, n-propanol, glycerol, butylene glycol, ethylene glycol, propylene glycol, mono- and diacylated monoglycerides, dimethyl isosorbide, acetone, dimethylformamide, 1,4-dioxane, polyethylene glycol, polyethylene glycol esters, polyethylene glycol sorbitans, polyethylene glycol monoalkyl ethers, polypropylene glycol, polypropylene alginate, PPG-10 butanediol, PPG-10 methyl glucose ether, PPG-20 methyl glucose ether, PPG-15 stearyl ether, propylene glycol dicaprylate, propylene glycol dicaprate, propylene glycol laurate;

(ii) mixing into the second solvent a first surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants;

(iii) mixing the solution with the second solvent and first surface modifier to define a pre-suspension of particles in a friable form; and

(iv) adding energy to the pre-suspension to form particles having an average effective particle size of from about 400 nm to about 2 microns.

Claim 55 (original): The method of claim 54 wherein the nonionic surfactant is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 56 (original): The method of claim 54 wherein the anionic surfactant is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 57 (original): The method of claim 54 wherein the cationic surfactant is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 58 (original): The method of claim 54 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 59 (original): The method of claim 58 wherein the anionic surfactant is a copolymer of oxyethylene and oxypropylene.

Claim 60 (original): The method of claim 59 wherein the copolymer of oxyethylene and oxypropylene is a block copolymer.

Claim 61 (original): The method of claim 54 further comprising the step of mixing into the second solvent a second surface modifier.

Claim 62 (original): The method of claim 61 wherein the second surface modifier is selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

Claim 63 (original): The method of claim 62 wherein the second surface modifier is selected from bile acids and salts thereof.

Claim 64 (original): The method of claim 54 further comprising the step of adding a pH adjusting agent to the second solvent.

Claim 65 (original): The method of claim 64 wherein the pH adjusting agent is selected from the group consisting of sodium hydroxide, hydrochloric acid, citrate buffer, acetate, lactate, and meglumine.

Claim 66 (original): The method of claim 64 wherein the pH adjusting agent is added to the second solvent to bring the pH of the second solvent within the range of from about 4 to about 10.

Claim 67 (original): The method of claim 54 wherein the energy-addition step comprises the step of subjecting the pre-suspension to heating, sonication, homogenization, counter current flow homogenization or microfluidization.

Claim 68 (original): The method of claim 67 wherein the energy-addition step further comprises the step of subjecting the pre-suspension to heat.

Claim 69 (original): The method of claim 54 further comprising the step of removing solvent and excess surfactants.

Claim 70 (original): The method of claim 69 wherein the solvent and surfactant removal step is accomplished via centrifugation, diafiltration, force-field fractionation, or high-pressure filtration.

Claim 71 (original): A method for preparing submicron sized particles of an organic compound, the solubility of which is greater in a water-miscible first solvent than in a second solvent which is aqueous, the process comprising the steps of

(i) dissolving the organic compound in the water-miscible first solvent to form a solution, the first solvent being selected from the group consisting of N-methyl-2-pyrrolidinone, 2-pyrrolidone, dimethyl sulfoxide, dimethylacetamide, lactic acid, methanol, ethanol, isopropanol, 3-pentanol, n-propanol, glycerol, butylene glycol, ethylene glycol, propylene glycol, mono- and diacylated monoglycerides, dimethyl isosorbide, acetone, dimethylformamide, 1,4-dioxane, polyethylene glycol, polyethylene glycol esters, polyethylene glycol sorbitans, polyethylene glycol monoalkyl ethers, polypropylene glycol, polypropylene alginate, PPG-10 butanediol, PPG-10 methyl glucose ether, PPG-20 methyl glucose ether, PPG-15 stearyl ether, propylene glycol dicaprylate, propylene glycol dicaprinate, propylene glycol laurate;

(ii) mixing into the solution a first surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants;

(iii) mixing the solution and first surface modifier with the second solvent to define a pre-suspension of particles in a friable form; and


(iv) adding energy to the pre-suspension to form particles having an average effective particle size of from about 400 nm to about 2 microns.

Claim 72 (original): The method of claim 71 wherein the nonionic surfactant of the first surface modifier is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 73 (original): The method of claim 71 wherein the anionic surfactant of the first surface modifier is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 74 (original): The method of claim 71 wherein the cationic surfactant of the first surface modifier is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 75 (original): The method of claim 71 wherein the first solvent is N-methyl-2-pyrrolidinone.

 Claim 76 (original): The method of claim 75 wherein the first surface modifier is a copolymer of oxyethylene and oxypropylene.

Claim 77 (original): The method of claim 76 wherein the copolymer of oxyethylene and oxypropylene is a block copolymer.

Claim 78 (original): The method of claim 71 further comprising the step of mixing into the solution a second surface modifier.

Claim 79 (original): The method of claim 71 further comprising the step of mixing into the second solvent a third surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.


Claim 80 (original): The method of claim 79 wherein the third surface modifier is a nonionic surfactant selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 81 (original): The method of claim 79 wherein the third surface modifier is an anionic surfactant selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 82 (original): The method of claim 79 wherein the third surface modifier is a cationic surfactant selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 83 (original): The method of claim 79 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 84 (original): The method of claim 75 wherein the second surface modifier is a copolymer of oxyethylene and oxypropylene.

 Claim 85 (original): The method of claim 84 wherein the copolymer of oxyethylene and oxypropylene is a block copolymer.

Claim 86 (original): The method of claim 79 further comprising the step of mixing into the solution a fourth surface modifier selected from the group consisting of anionic surfactants, cationic surfactants and nonionic surfactants.

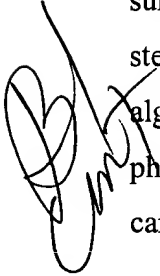
Claim 87 (original): The method of claim 71 further comprising the step of mixing into the second solvent a phospholipid.

Claim 88 (original): The method of claim 87 wherein the phospholipid is selected from natural phospholipids and synthetic phospholipids.

Claim 89 (original): The method of claim 87 wherein the phospholipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine, phosphatidylserine, phosphatidylinositol, phosphatidylglycerol, phosphatidic acid, lysophospholipids, egg phospholipid and soybean phospholipid.

Claim 90 (original): The method of claim 87 further comprising the step of mixing into the solution a fifth surface modifier selected from anionic surfactants, cationic surfactants and non-ionic surfactants.

Claim 91 (original): The method of claim 90 wherein the nonionic surfactant of the fifth surface modifier is selected from the group consisting of polyoxyethylene fatty alcohol ethers, sorbitan fatty acid esters, polyoxyethylene fatty acid esters, sorbitan esters, glycerol monostearate, polyethylene glycols, cetyl alcohol, cetostearyl alcohol, stearyl alcohol, poloxamers, polaxamines, methylcellulose, hydroxycellulose, hydroxy propylcellulose, hydroxy propylmethylcellulose, noncrystalline cellulose, polyvinyl alcohol, and polyvinylpyrrolidone.



Claim 92 (original): The method of claim 90 wherein the anionic surfactant of the fifth surface modifier is selected from the group consisting of potassium laurate, triethanolamine stearate, sodium lauryl sulfate, sodium dodecylsulfate, alkyl polyoxyethylene sulfates, sodium alginate, dioctyl sodium sulfosuccinate, phosphatidyl glycerol, phosphatidyl inositol, phosphatidylserine, phosphatidic acid and their salts, glyceryl esters, sodium carboxymethylcellulose, bile acids and their salts and calcium carboxymethylcellulose.

Claim 93 (original): The method of claim 90 wherein the cationic surfactant of the fifth surface modifier is selected from the group consisting of quaternary ammonium compounds, benzalkonium chloride, cetyltrimethylammonium bromide, chitosans and lauryldimethylbenzylammonium chloride.

Claim 94 (currently amended): The method of claim 90 wherein the fifth surface modifier is a bile acids-acid and their salts or a salt thereof.


Claim 95 (original): The method of claim 90 wherein the first solvent is N-methyl-2-pyrrolidinone.

Claim 96 (original): The method of claim 95 wherein the energy-addition step comprises the step of

subjecting the pre-suspension to heating, sonication, homogenization, counter current flow homogenization or microfluidization.

Claim 97 (original): The method of claim 96 wherein the energy-addition step further comprises the step of subjecting the pre-suspension to heat.

Claim 98 (original): The method of claim 96 further comprising the step of removing solvent and excess surfactants through repeated removal and replacement of the supernatant fluid.

 Claim 99 (original): The method of claim 98 wherein the solvent and surfactant removal step is accomplished via centrifugation, diafiltration, force-field fractionation, or high-pressure filtration.

